# Sightlines LLC
# FY2012 Facilities MB&A Presentation
# University of Missouri

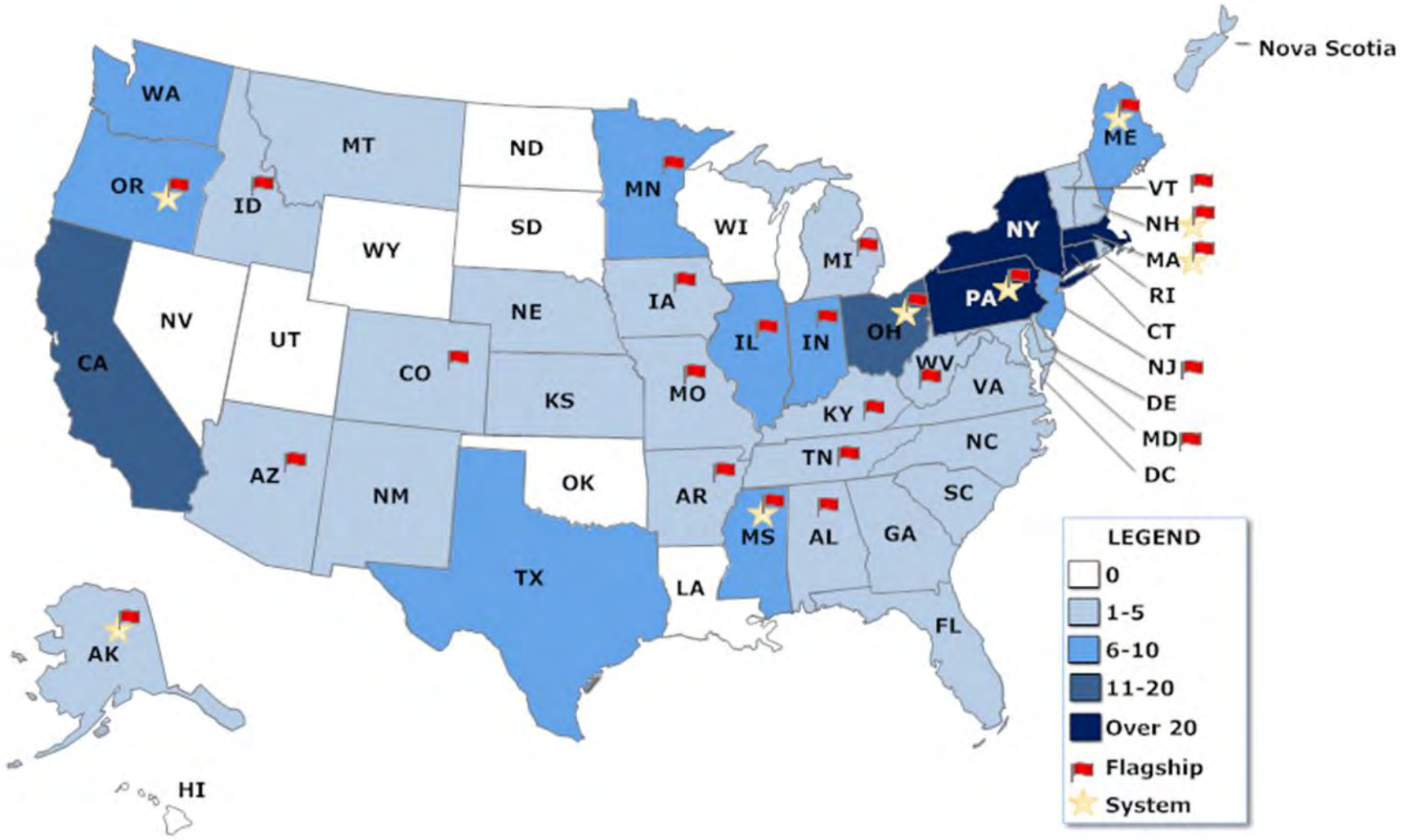
*Date: November 15, 2012*

*Presented by: Peter Reeves, Michael Bomhoff and Kathleen Buckley*

Sightlines

# Sightlines profile: 39 states, DC, Nova Scotia






**Common facilities vocabulary**

**Consistent analytical methodology**

**Context through benchmarking**

# A vocabulary for measurement

## The Return on Physical Assets – ROPA℠

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The annual investment needed to ensure buildings will properly perform and reach their useful life ***"Keep-Up Costs"***

**Annual Stewardship**

The accumulated backlog of repair and modernization needs and the definition of resource capacity to correct them ***"Catch-Up Costs"***

**Asset Reinvestment**

The effectiveness of the facilities operating budget, staffing, supervision, and energy management

**Operational Effectiveness**

The measure of service process, the maintenance quality of space and systems, and the customers opinion of service delivery

**Service**

**Asset Value Change**

**Operations Success**

# Peer Institutions

| Current Peer Group |
| --- |
| Indiana University- Bloomington |
| Iowa State University |
| Michigan State University |
| Northwestern University |
| Ohio State University |
| Purdue University |
| Pennsylvania State University |
| University of Illinois- Urbana/ Champaign |
| University of Michigan |
| University of Minnesota- Twin Cities |

**Comparative Considerations**

Size, technical complexity, region, geographic location, and setting are all factors included in the selection of peer institutions

**SEC in Sightlines Database:**

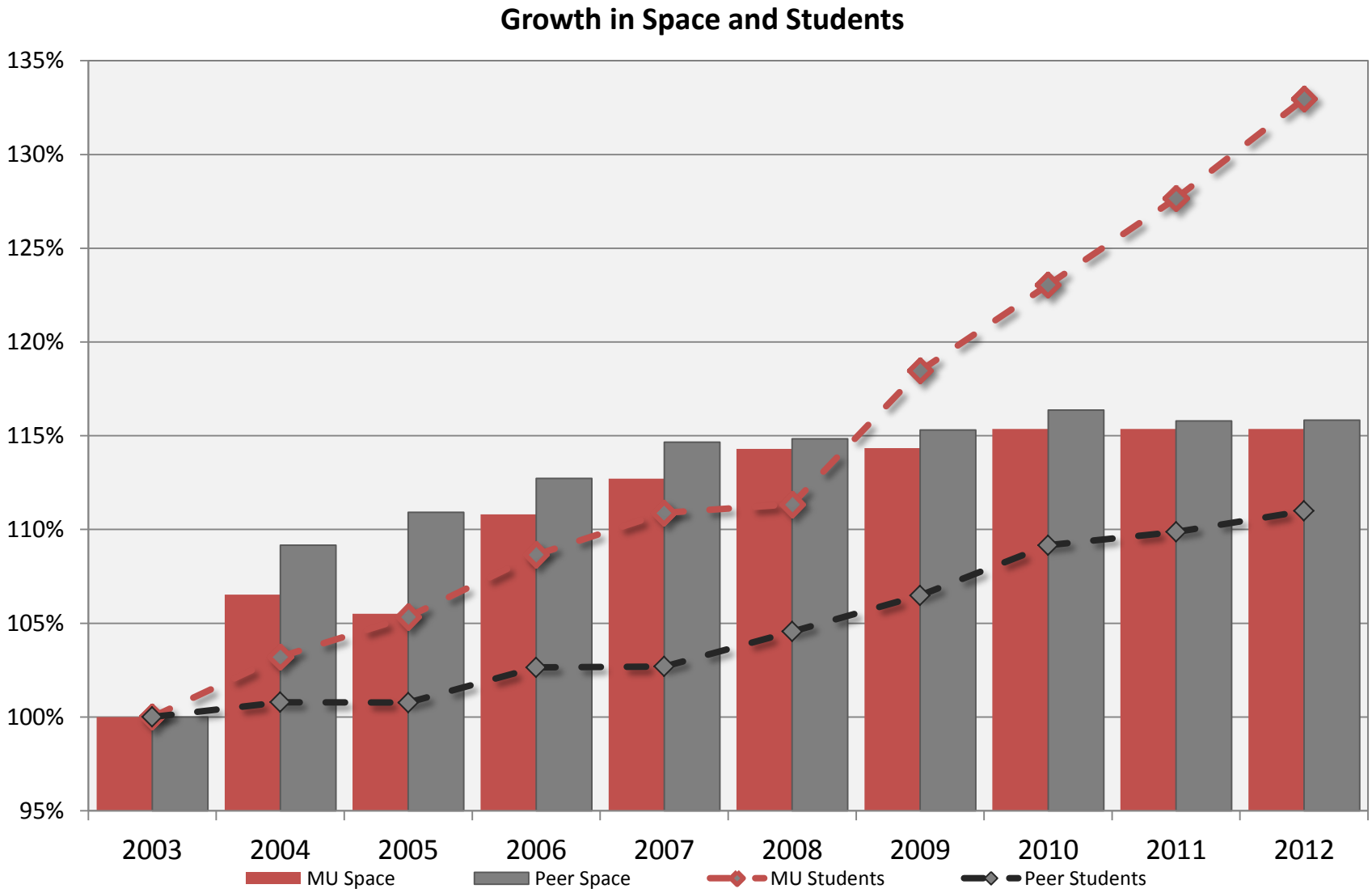
| | |
| --- | --- |
| Texas A&M | University of Tennessee |
| Ole Miss | University of Arkansas |
| Mississippi State | University of Kentucky |
| University of Alabama | |

# Core Campus Issues

- Growing Enrollment and Aging Campus
- Growing Backlog and Changing Demands
- Operational Inputs and Service Impacts

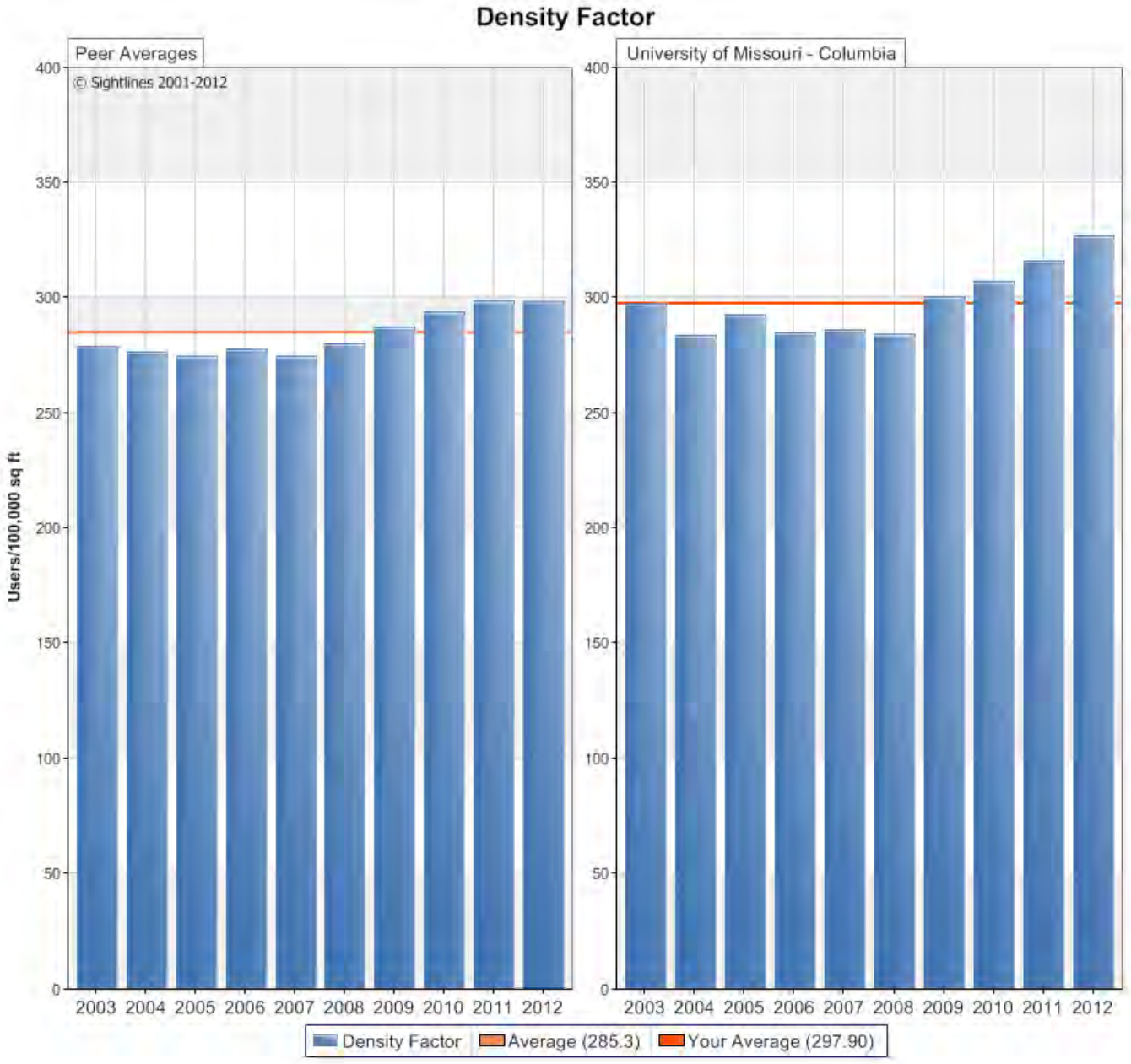
# Enrollment Growth Exceeds Space

## Increasing density factor and growth versus peers



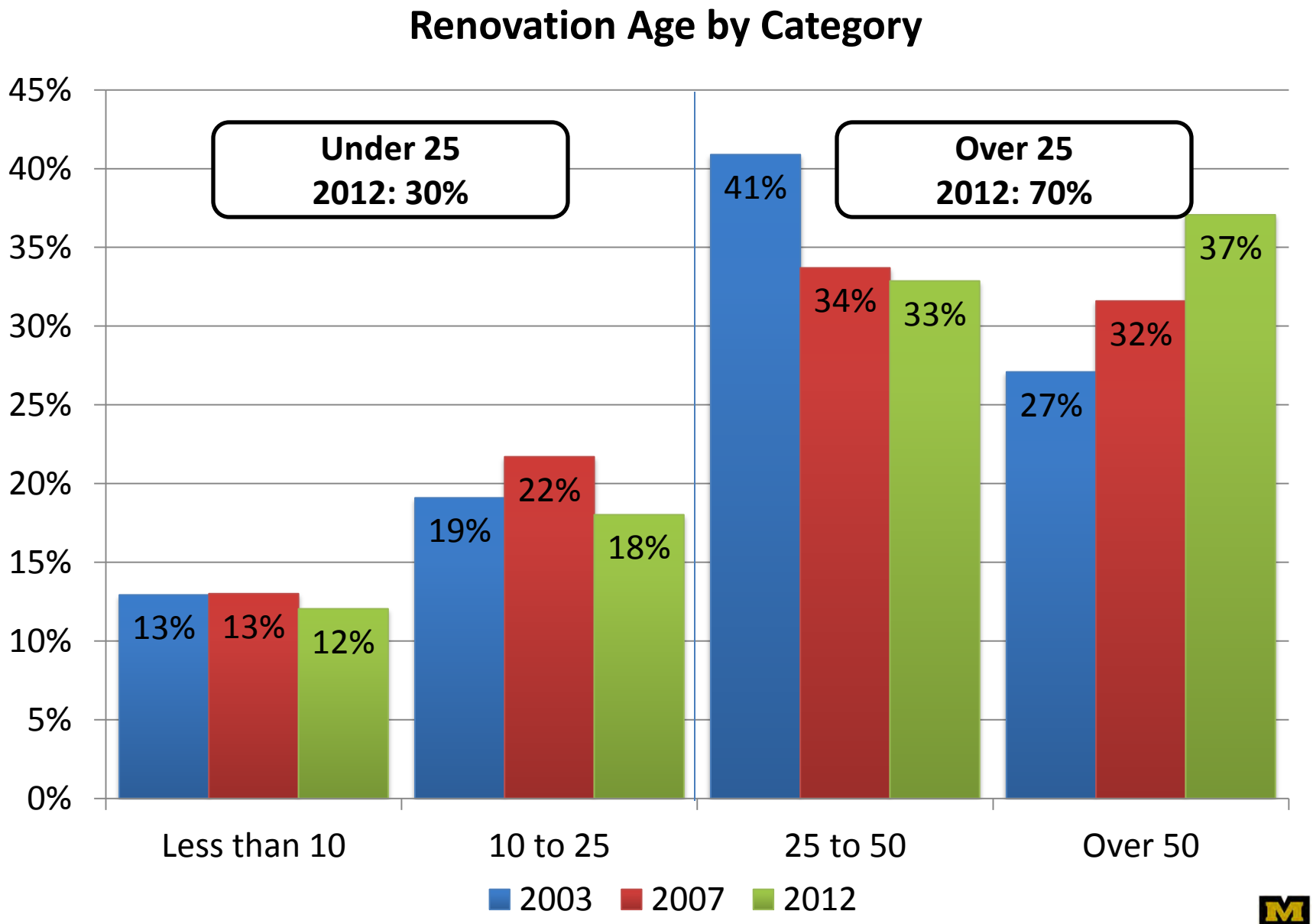
# Density Factor vs. Peers

## Density Factor exceeds peer averages due to recent enrollment growth

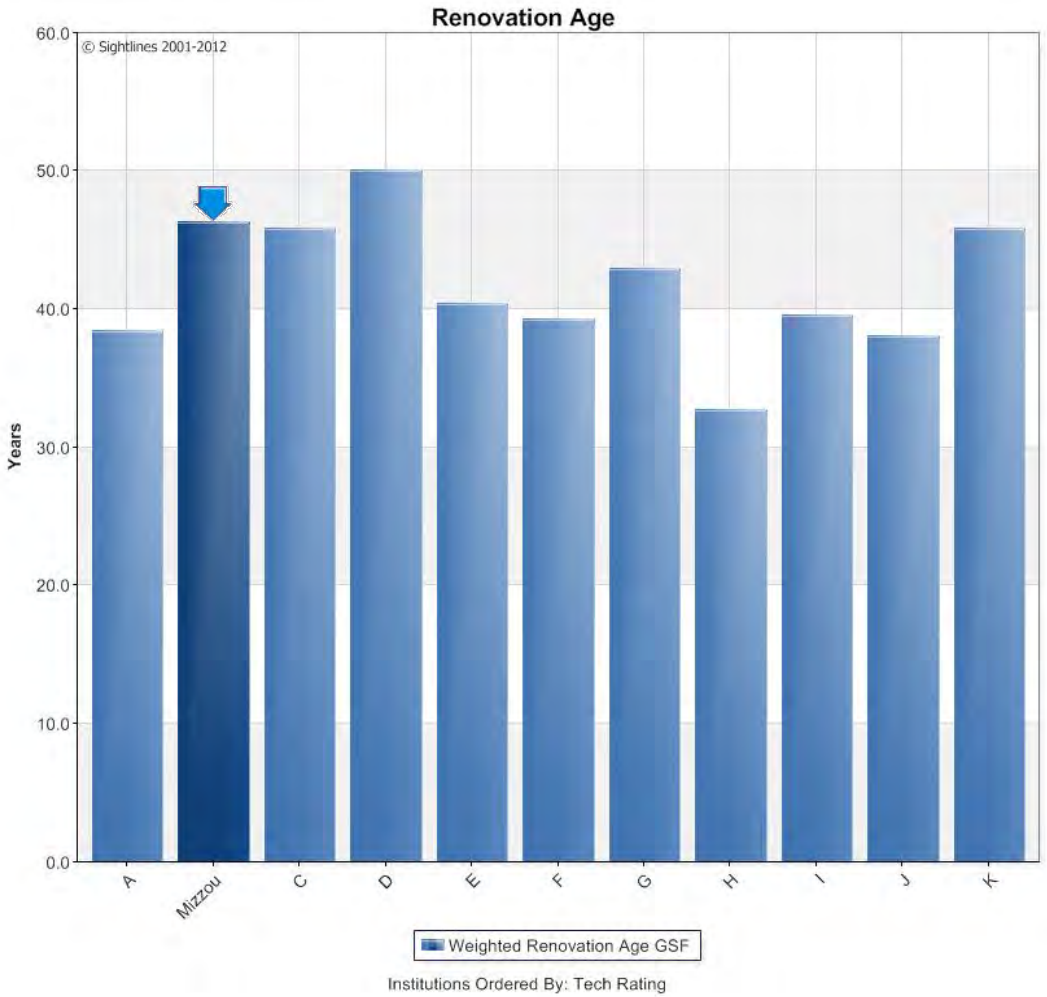


# Campus Age Profile

Largest percentage (70%) of campus in older age categories



# MU is the second oldest campus in the peer group




| Impacts |
| --- |
| Campus service levels |
| Reactive maintenance/critical maintenance |
| Life Cycles coming due |
| Backlog becoming more “urgent” |

# Capital strategy based on building life cycles

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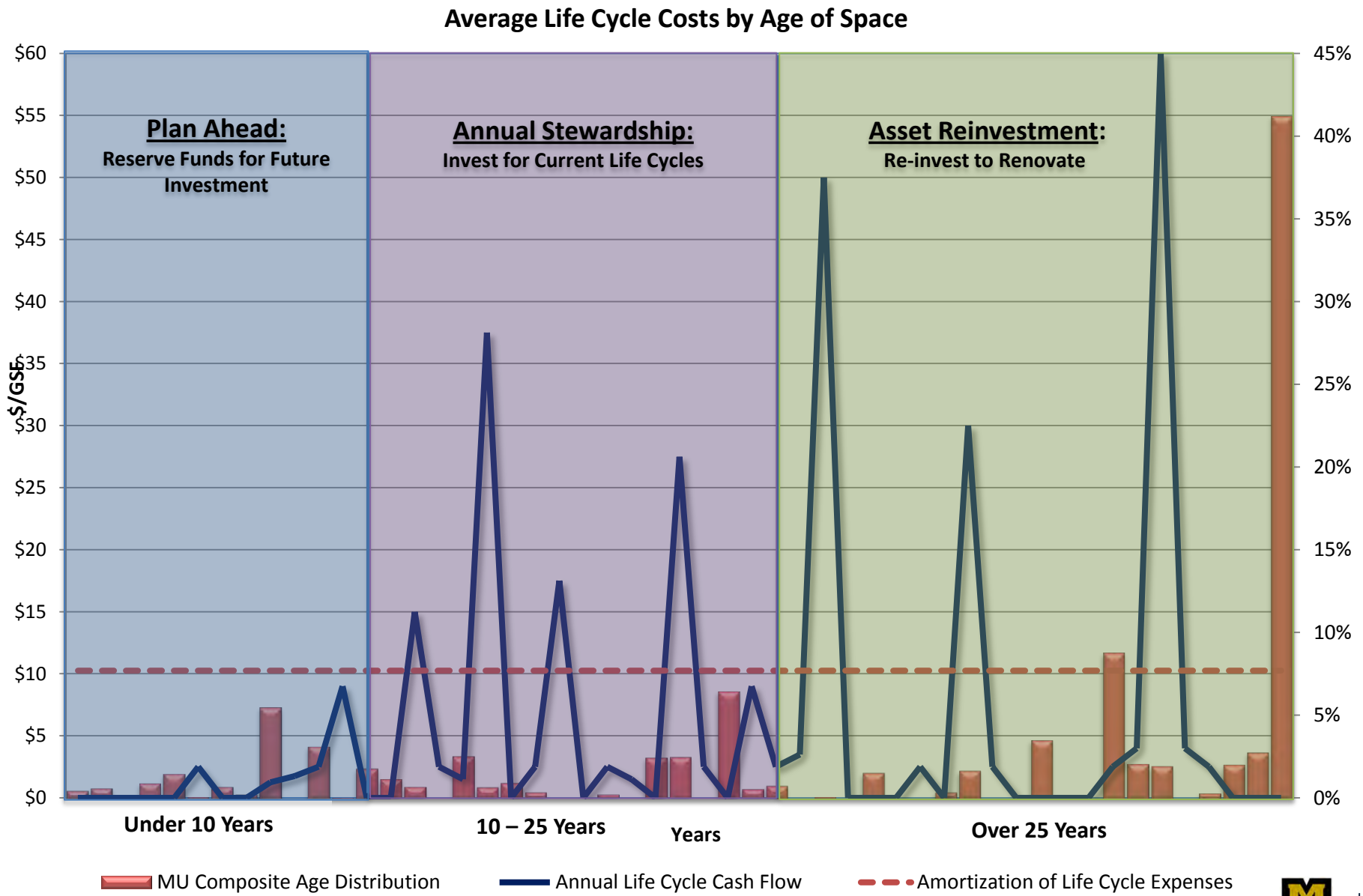


** Life cycle costs based on the average tech 3 academic space.*

# Core Campus Issues

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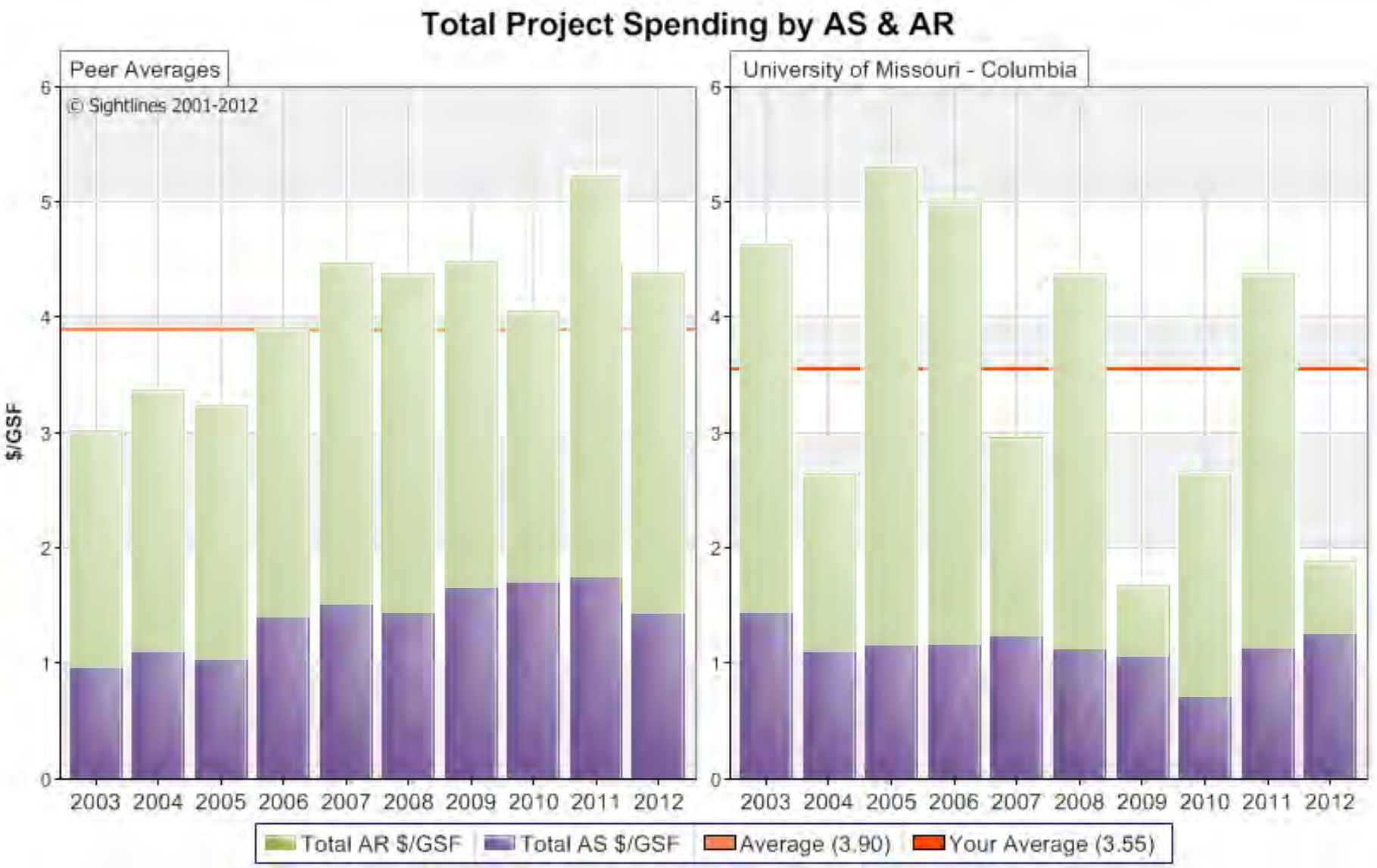
# Capital investments falling below peers



# Defining stewardship investment targets

## Target annual stewardship of $30.2M annually into existing facilities

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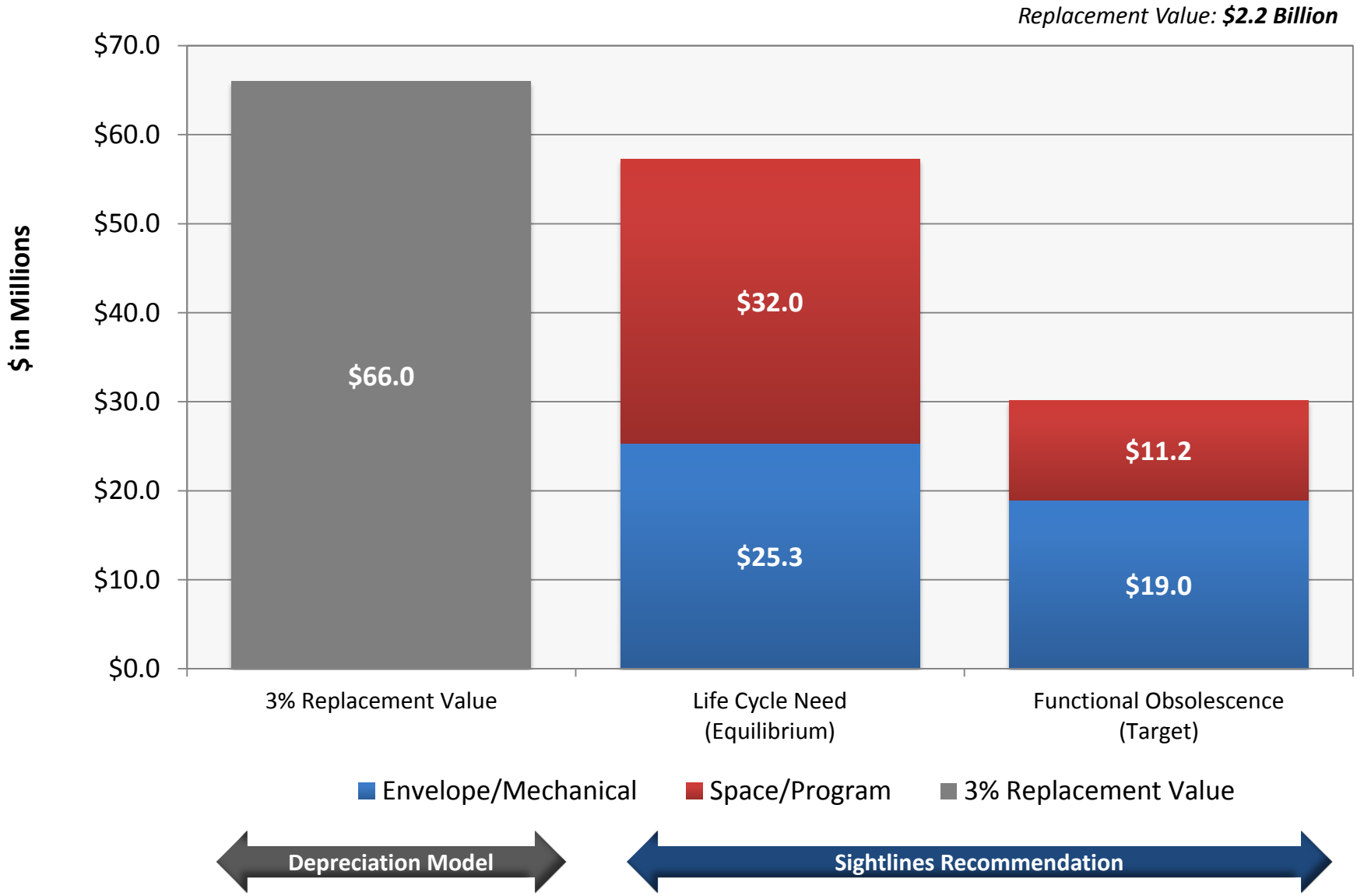
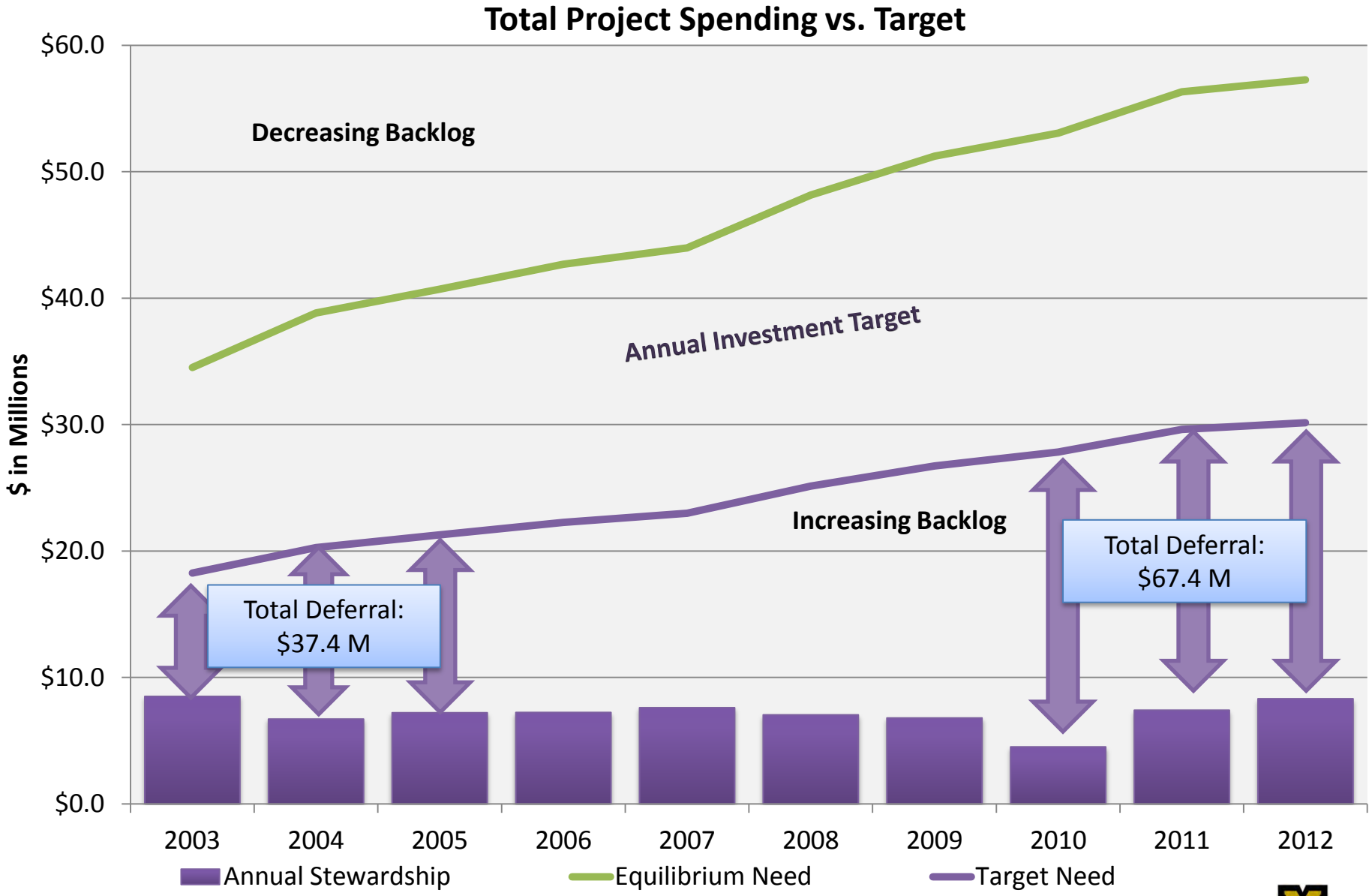


# Deferral has doubled from the 2003-2005 levels



# Stewardship focusing on more space and program needs

## Durable investments(envelope/Mechanical have greatest “bang for your buck”

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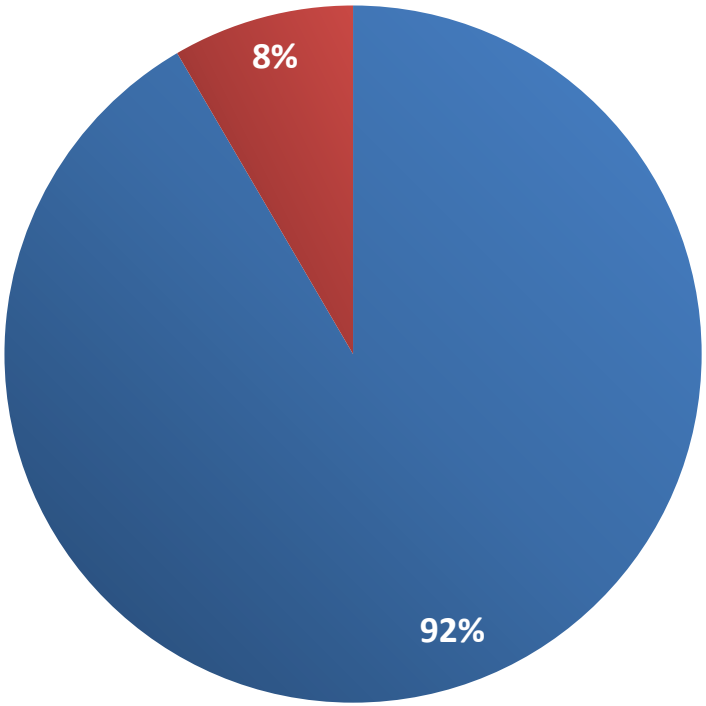
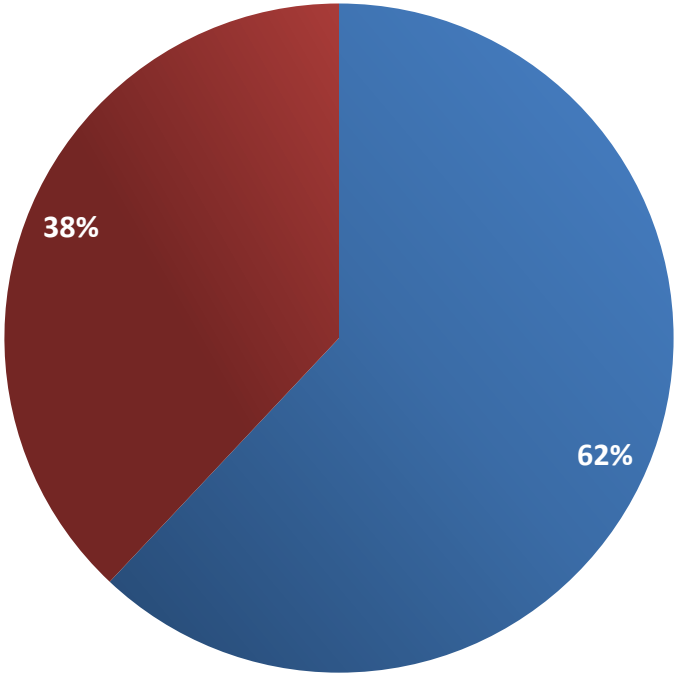
**Stewardship Spending Mix**

*2003-2005*



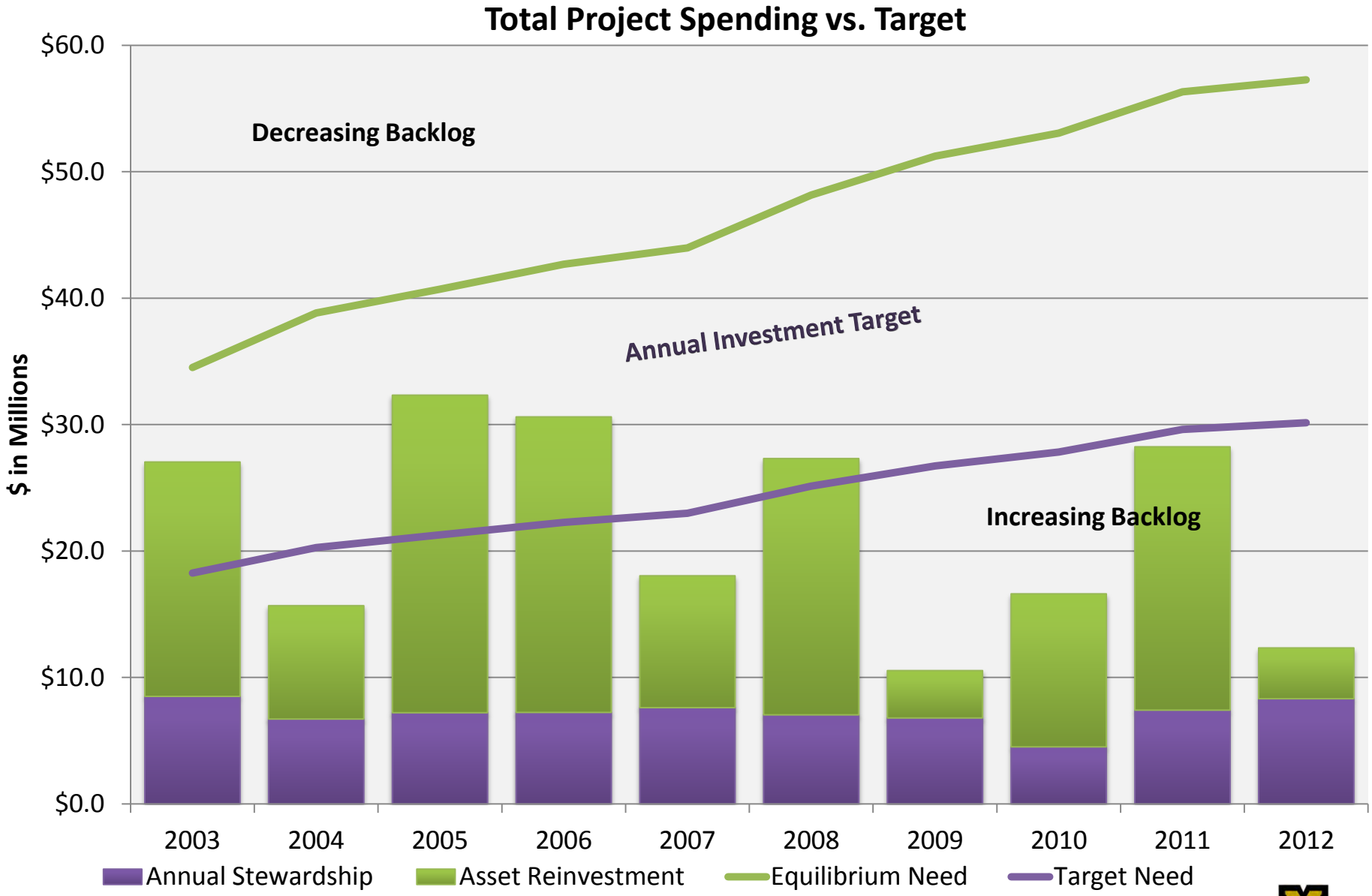

**Stewardship Spending Mix**

*2010-2012*

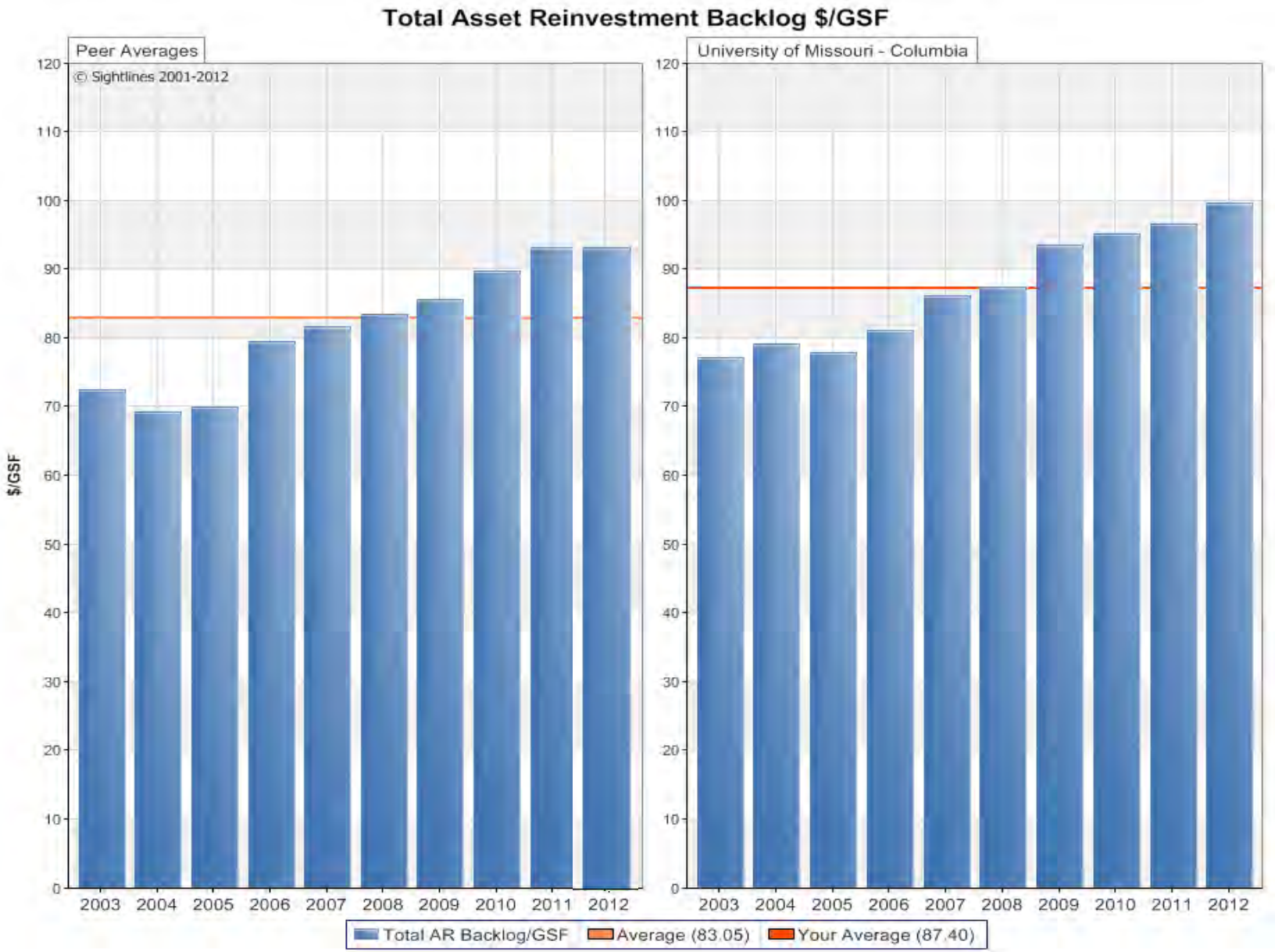



Envelpoe/Mech  Space/Programing

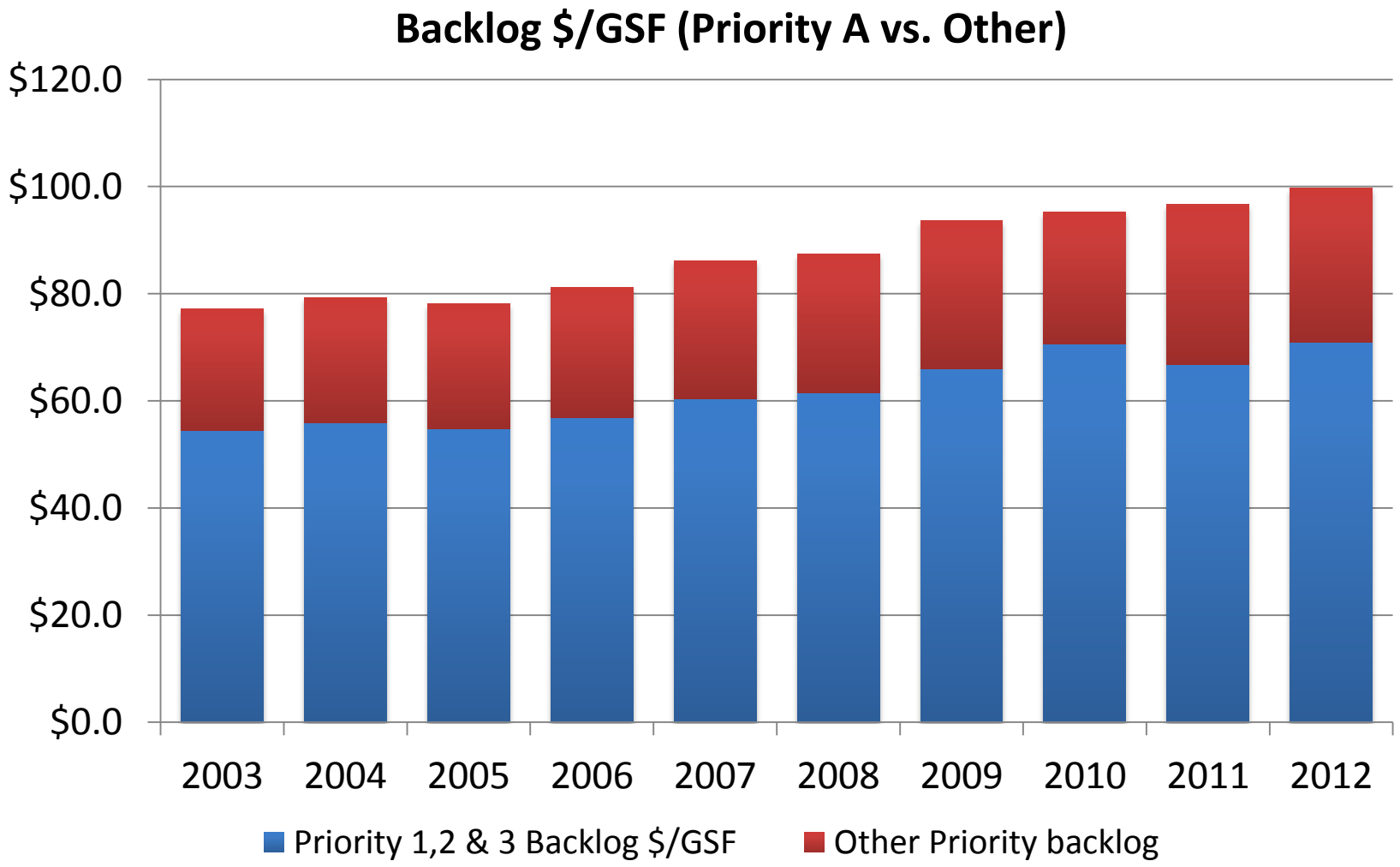
# One – time investments are not bridging the gap



# Backlog of needs approaching $100/gsf level



# MU's priority needs continue to grow



# Core Campus Issues

- Growing Enrollment and Aging Campus
- Growing Backlog and Changing Demands
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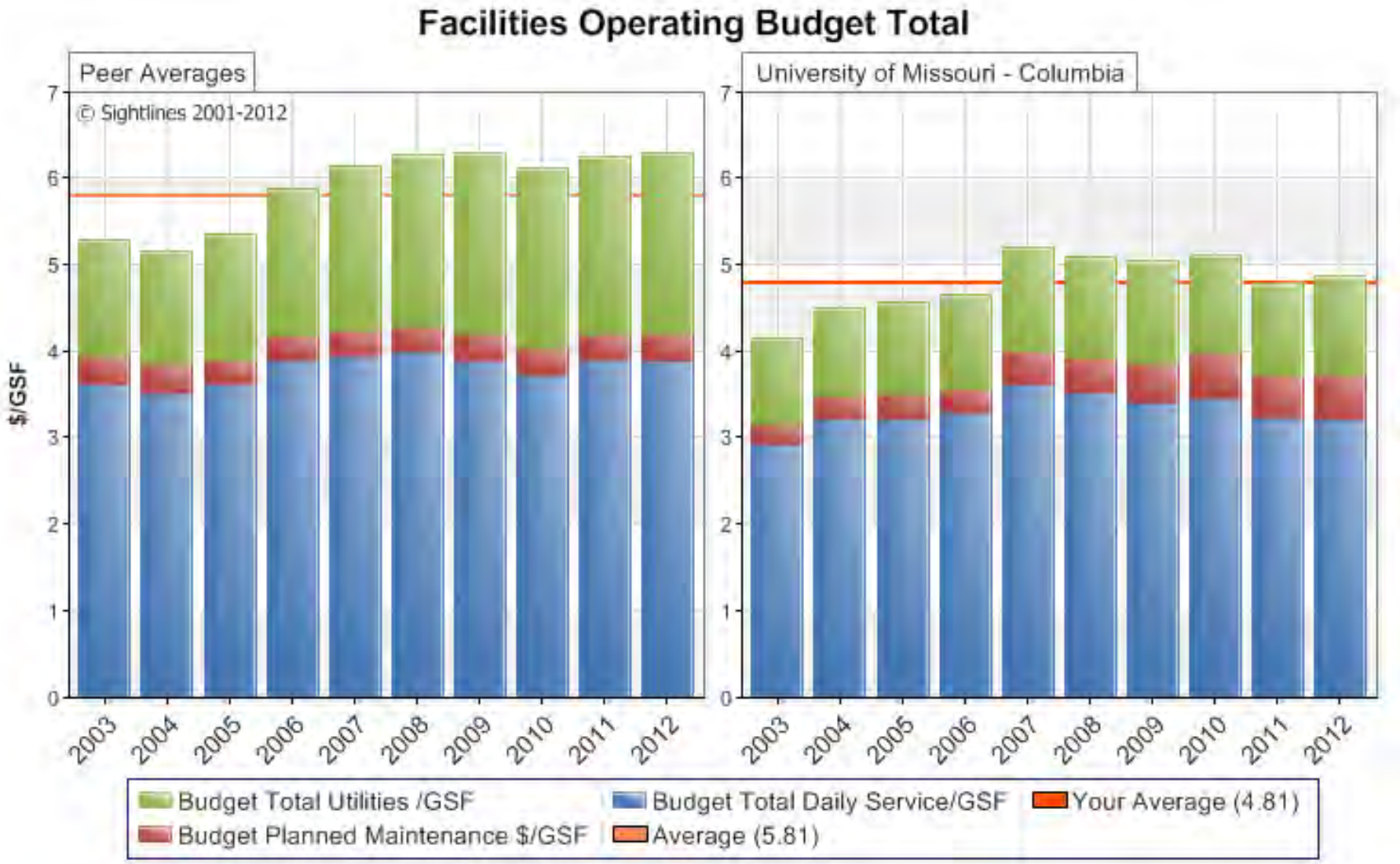
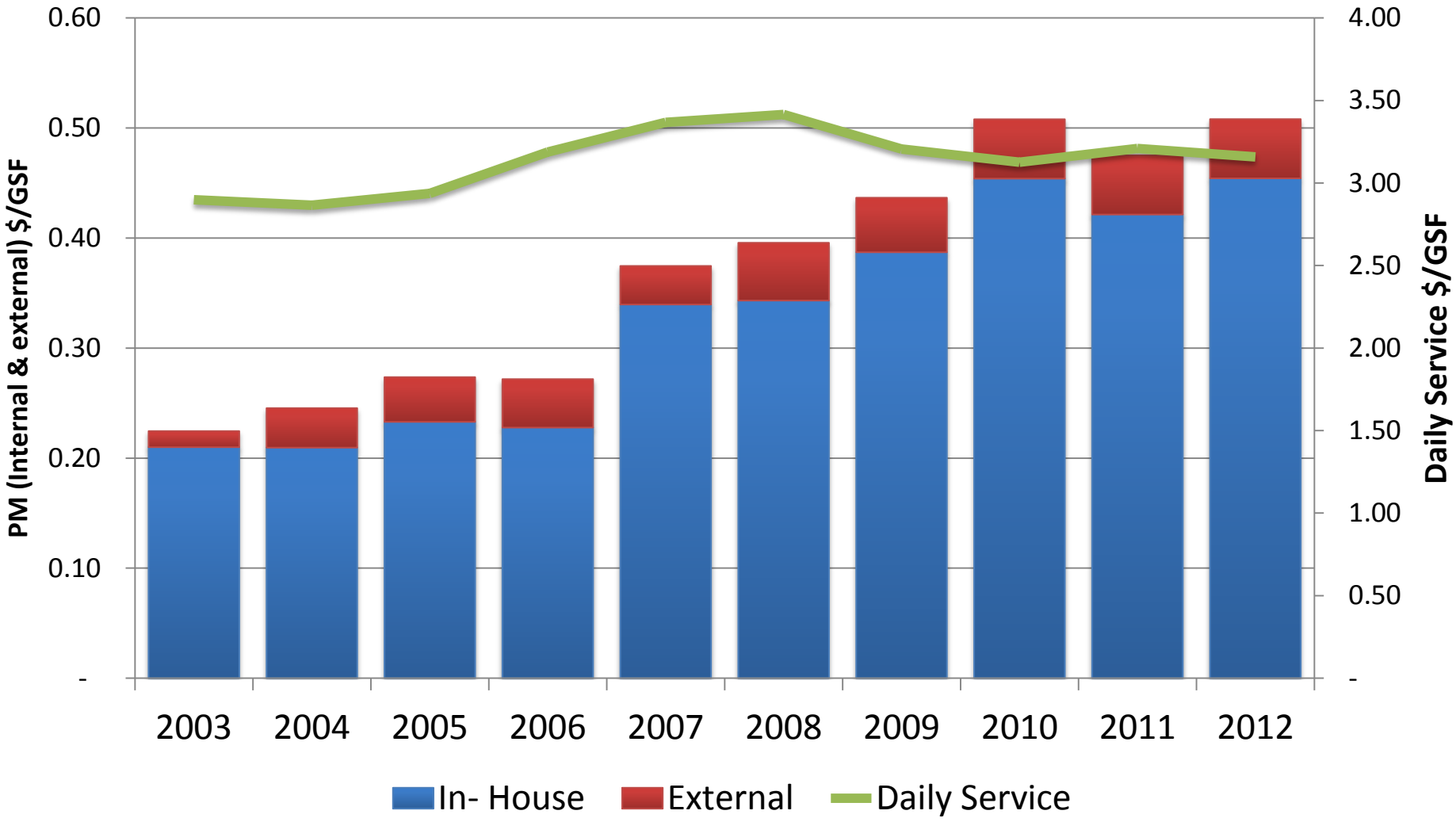
# Budget consistently lower than peer averages

## Declining Daily service/PM budget



# The relationship between daily service and PM

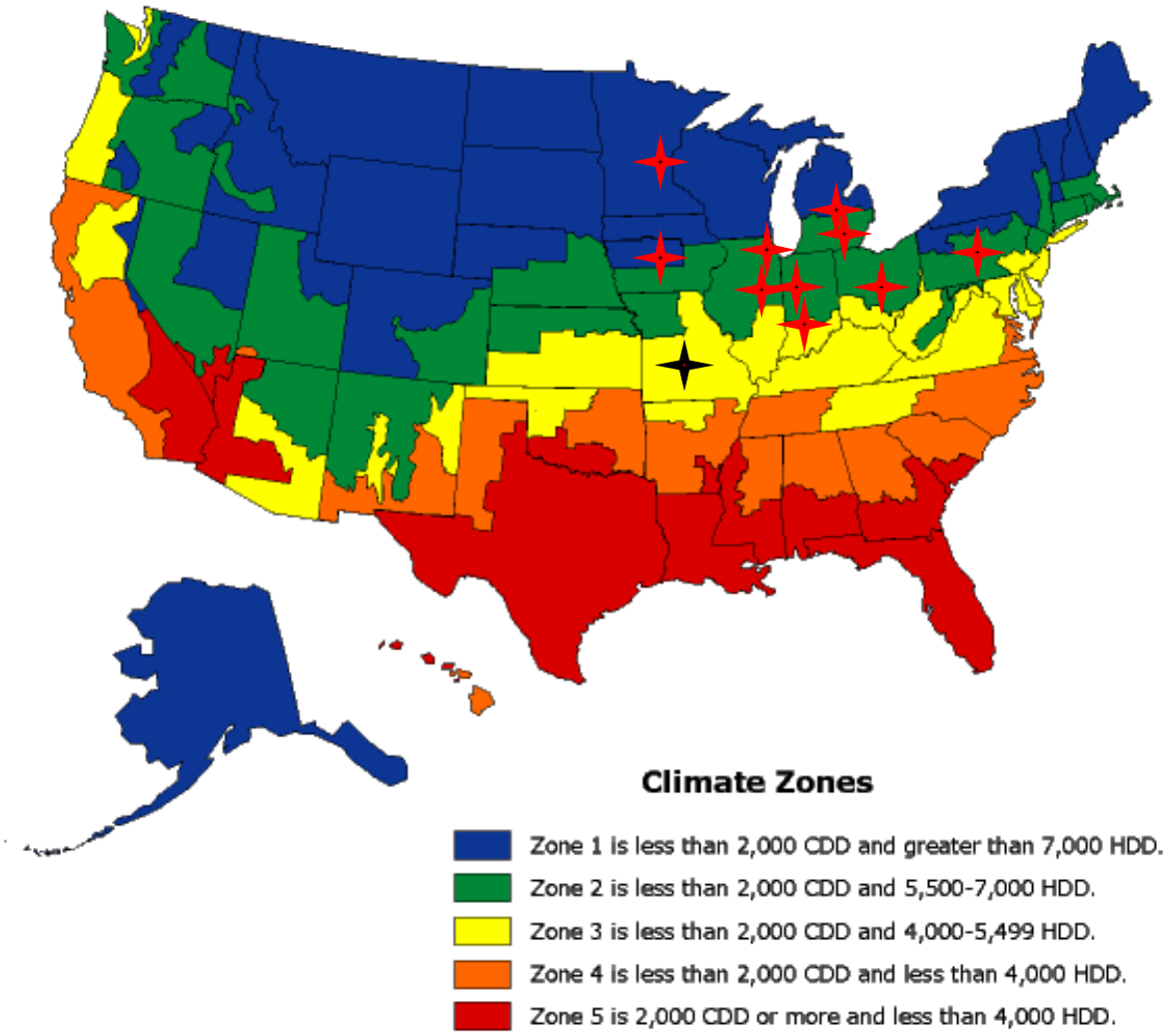
## Can PM continue to grow as DS remains flat?



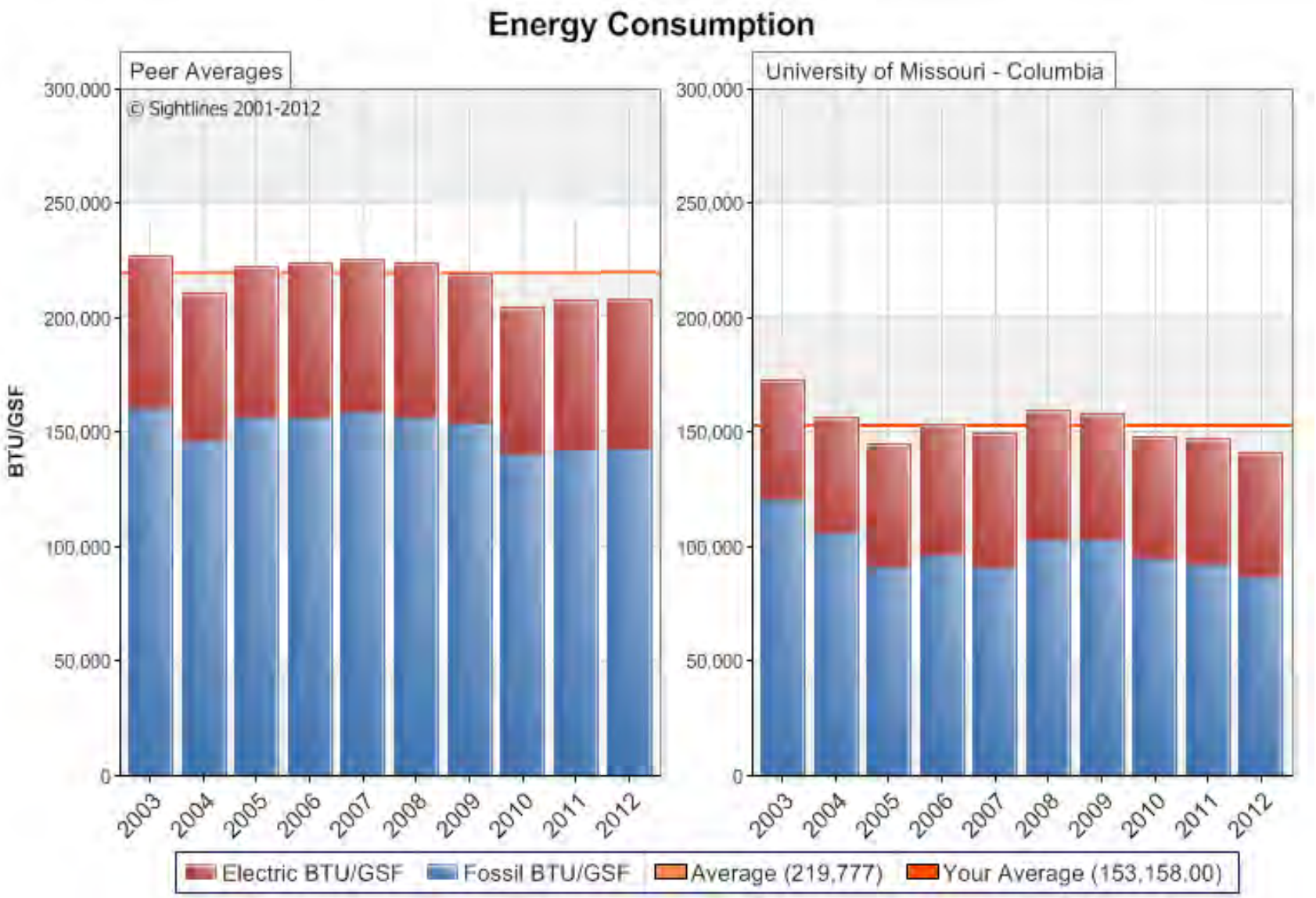
# ROPA Peer Energy Group

Sightlines

| Institution |
| --- |
| Indiana University- Bloomington |
| Iowa State University |
| Michigan State University |
| Northwestern University |
| Ohio State University |
| Purdue University |
| Pennsylvania State University |
| University of Illinois- Urbana/ Champaign |
| University of Michigan |
| University of Minnesota- Twin Cities |

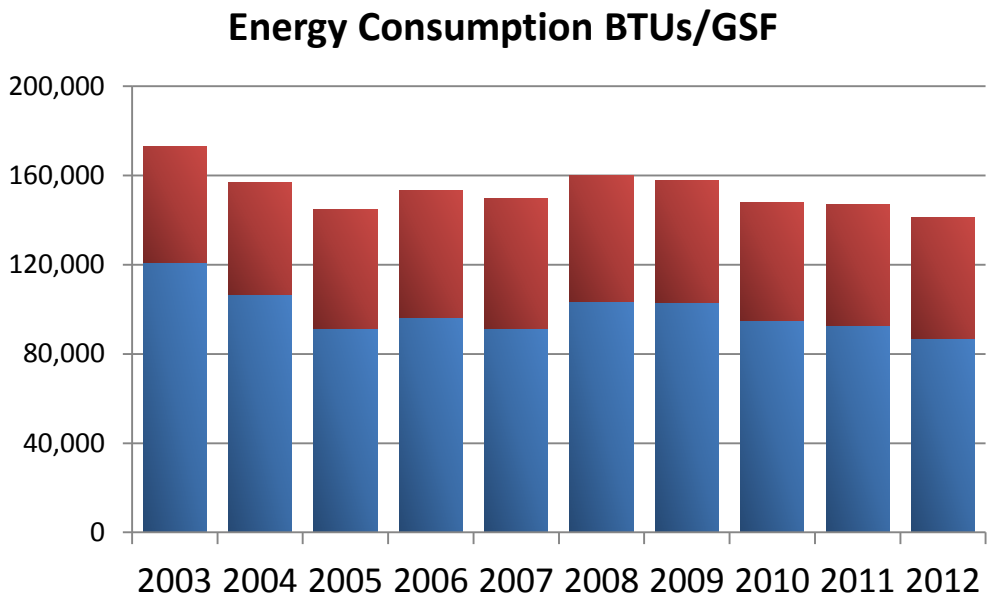


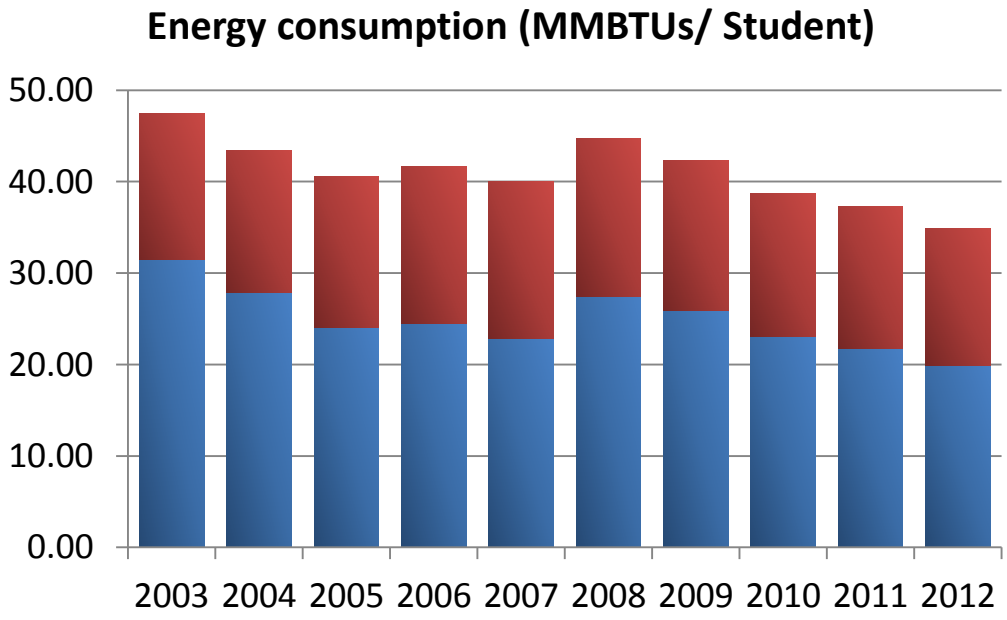
# Below peers, with decreasing consumption trend

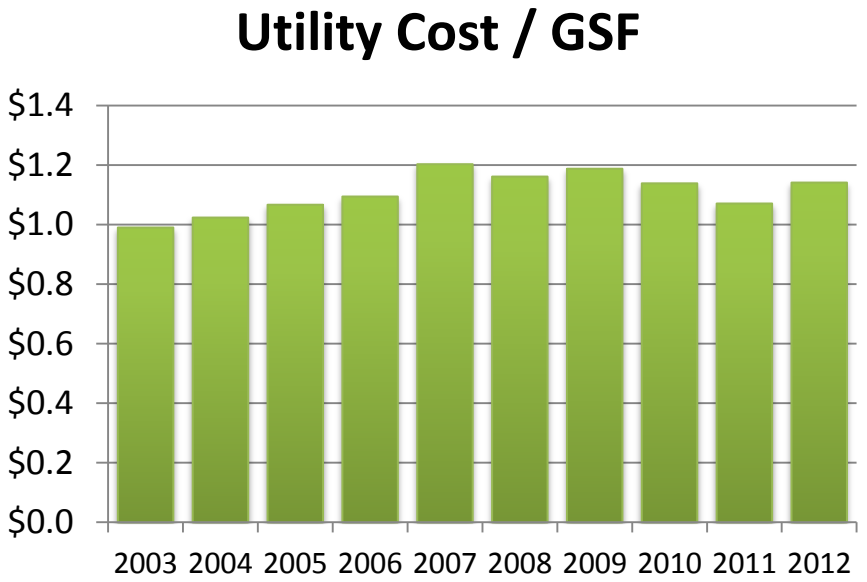


# Three Measures of Energy Management

Sightlines



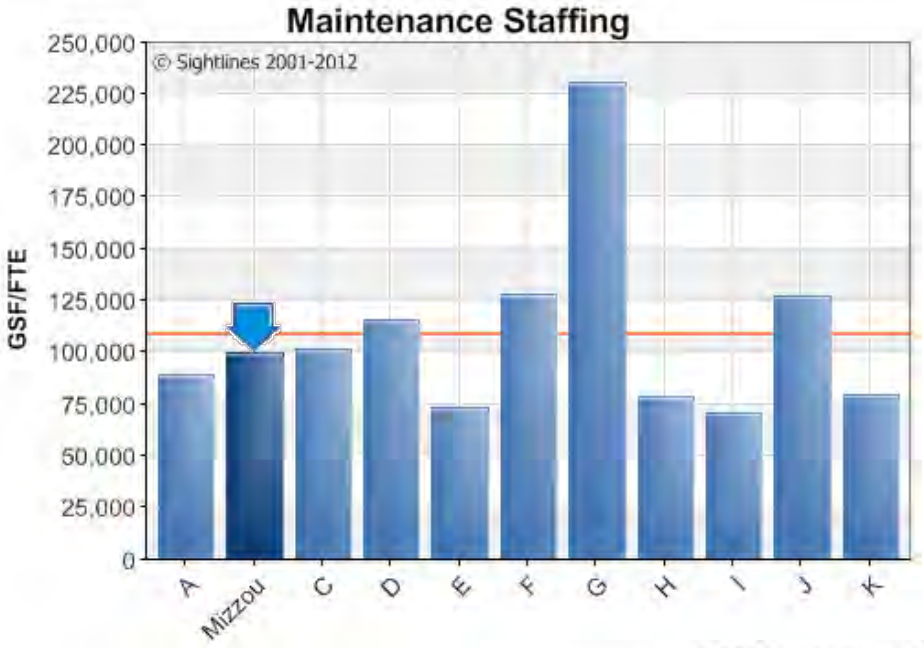



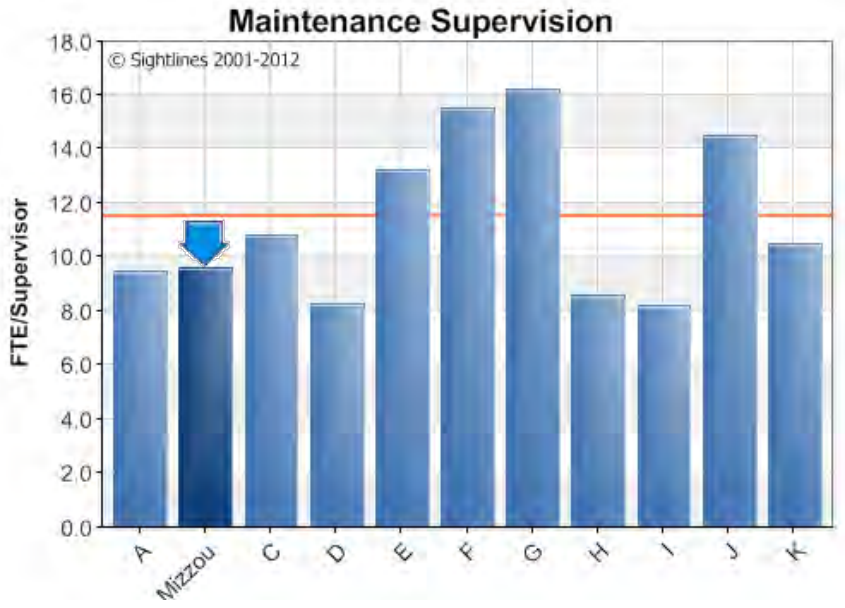




Cost increase associate with natural gas use while plant was being upgraded

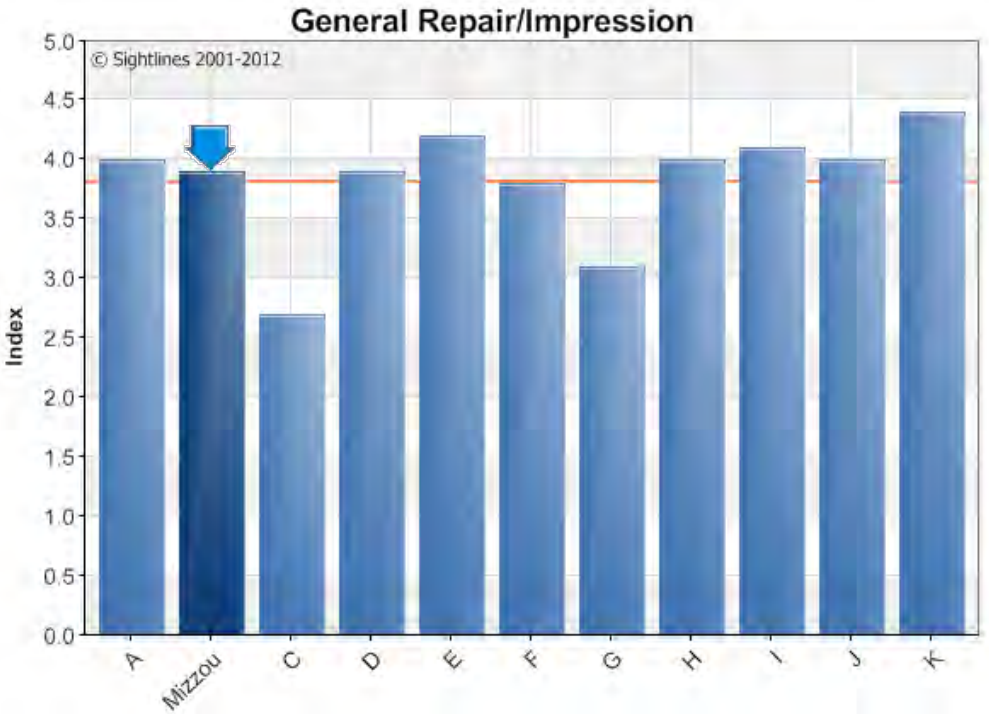
# Similar staffing inputs, less material spending

## Growing backlog and density often increase material spending



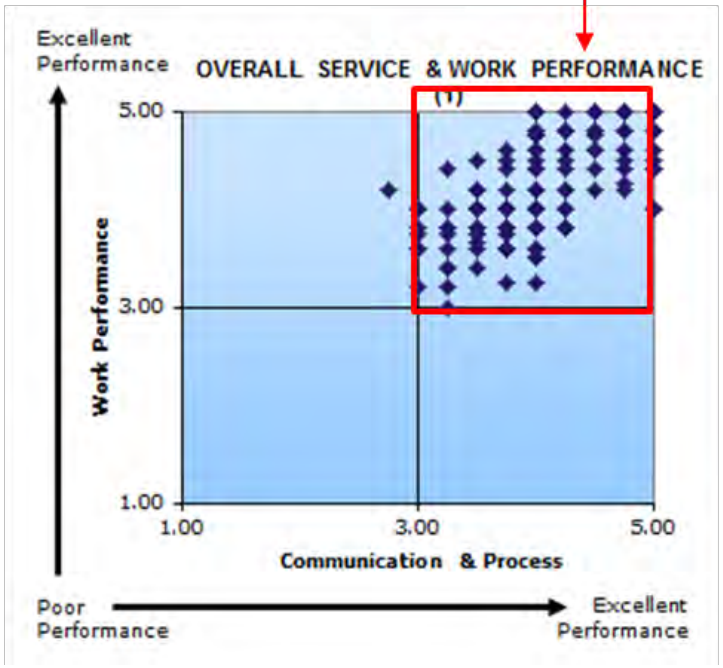

# Service Outputs - Maintenance




**ROPA Scatterplot**

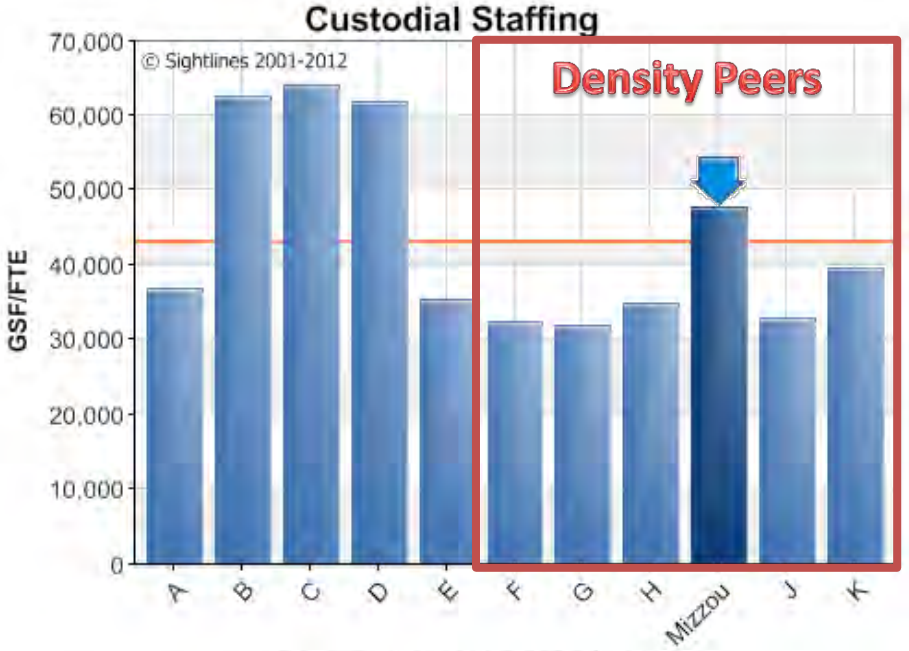
***Performance of Work and Communication***

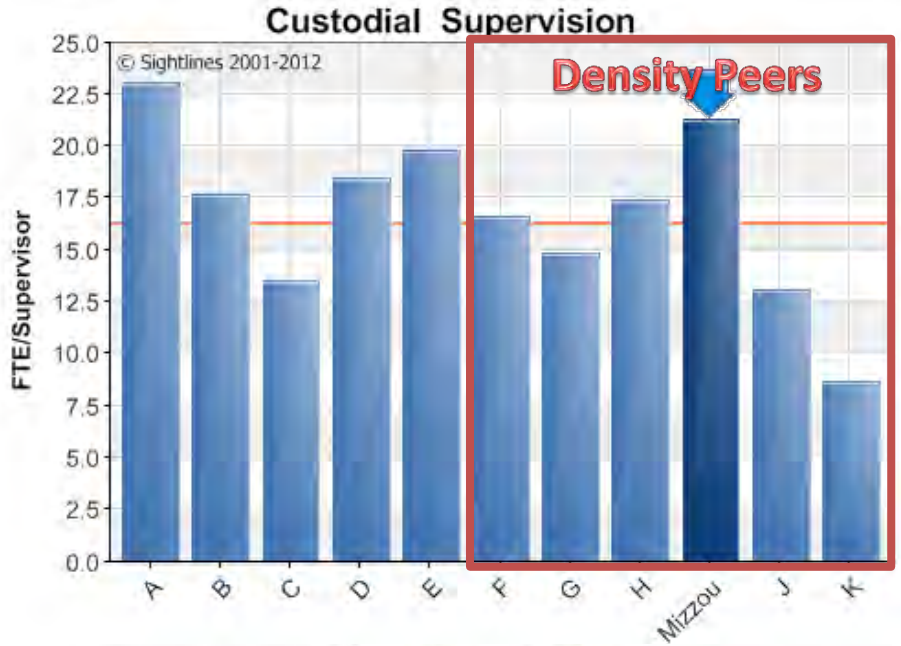
"Best practice zone"

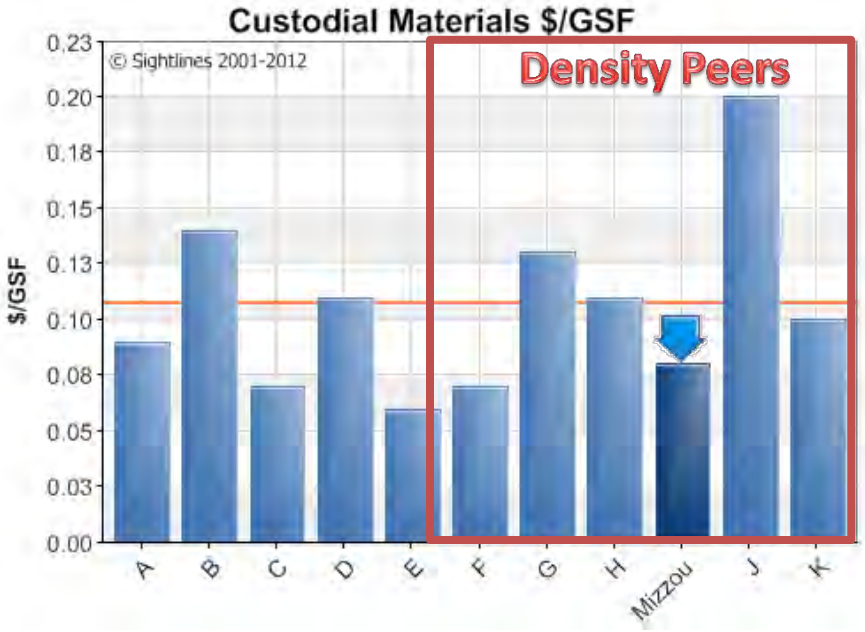


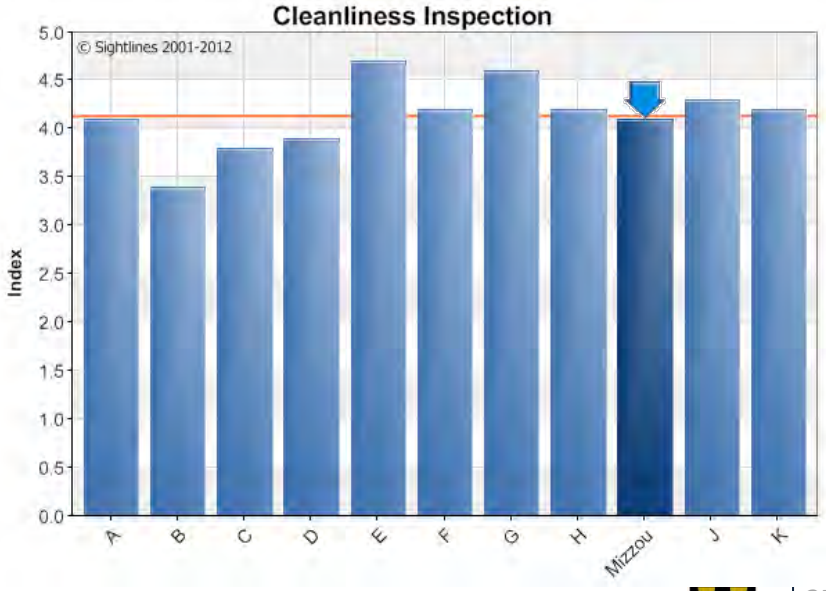
# Custodial Resources

## Higher Density, Aging Buildings and Fewer Resources affect Cleanliness Scores



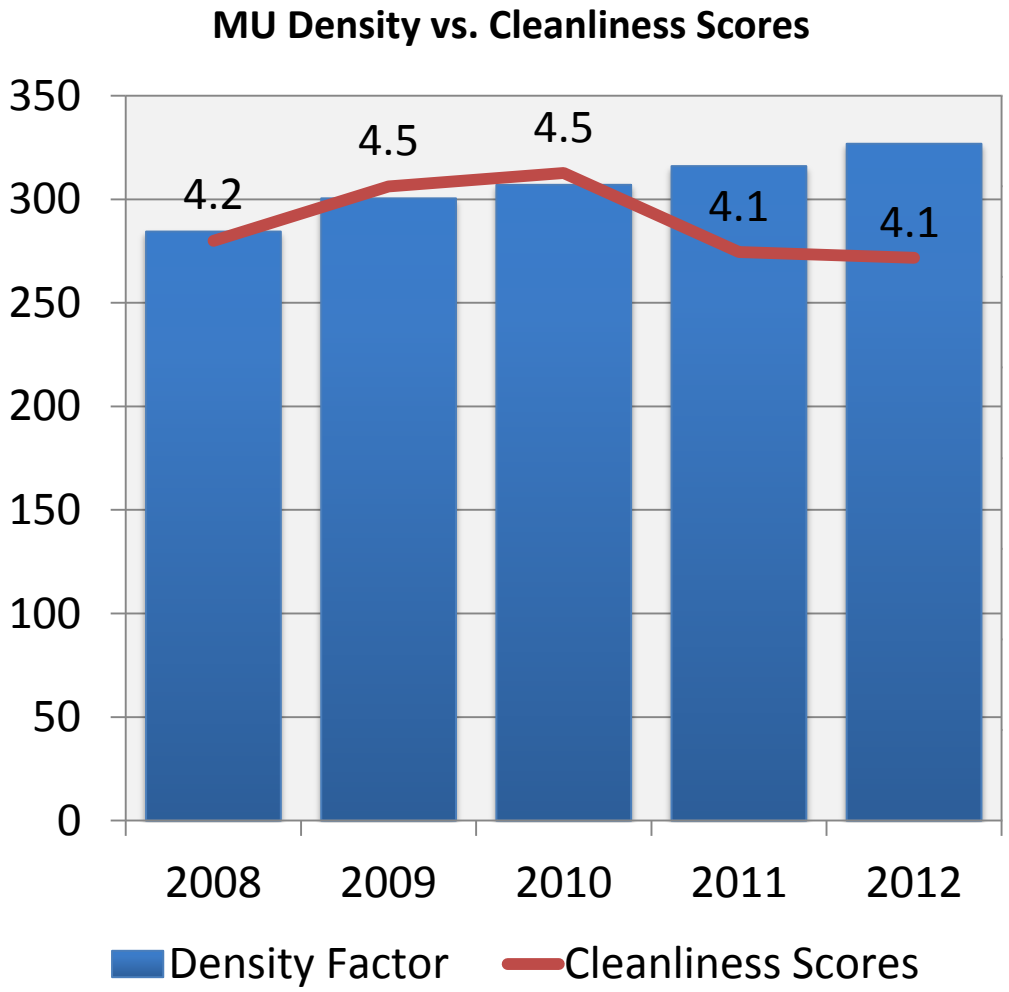



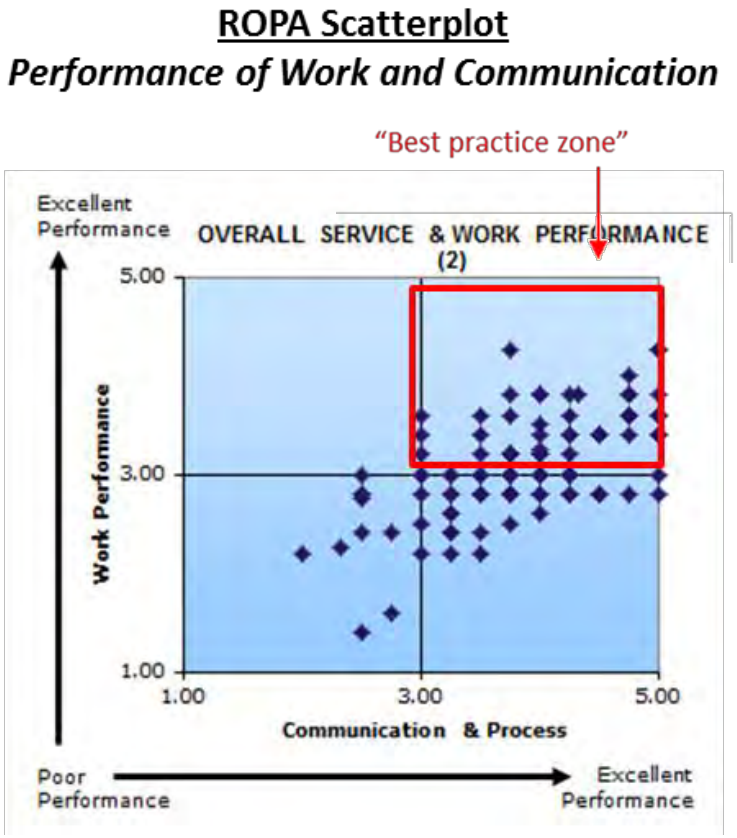



# Service Outputs - Custodial

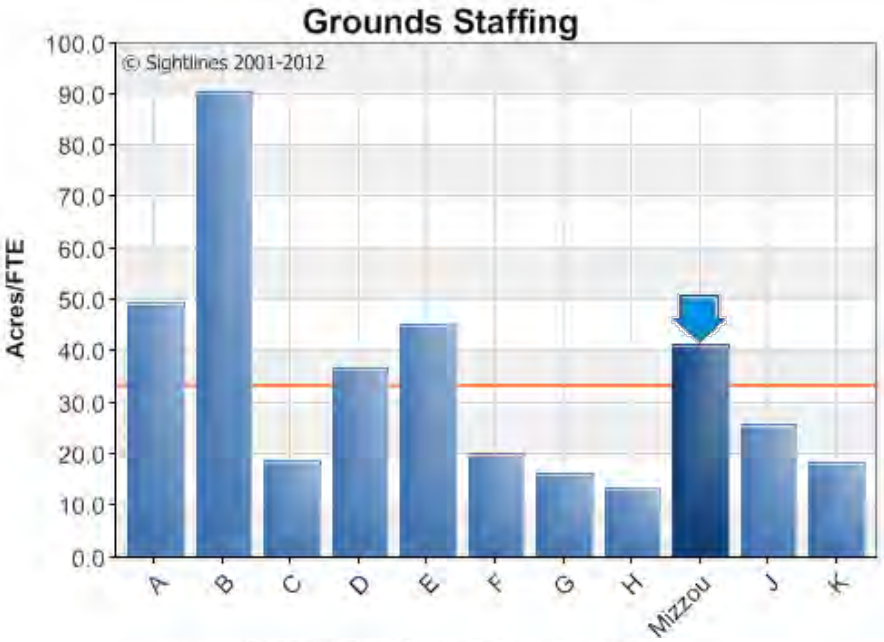
## Effects of growing enrollment on density factor and inspection scores

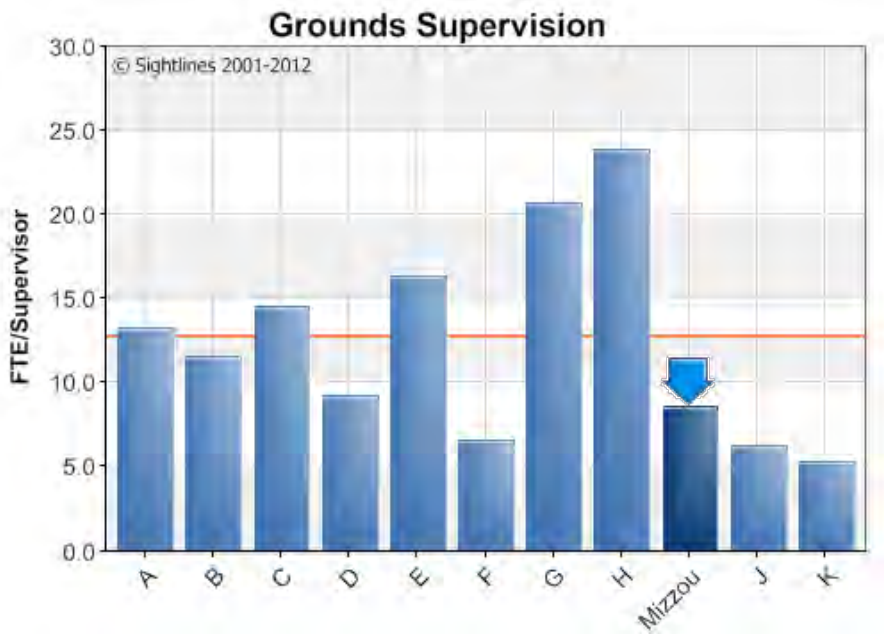


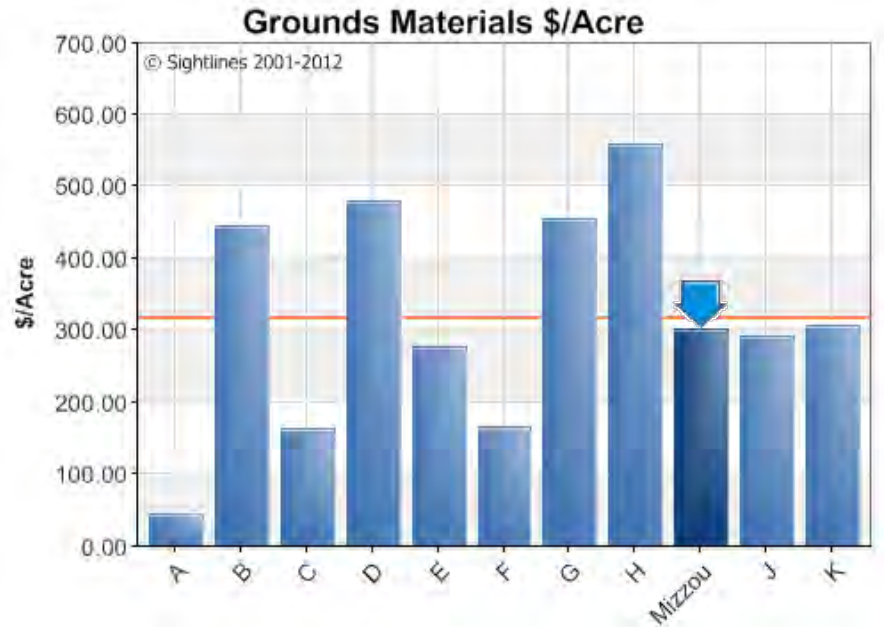



# Less Staffing, less materials impacting inspection score






# Conclusions

## Review of Core Campus Issues

Sightlines

### Growing Enrollment and Aging Campus

- Density will continue to increase strain on facilities
- Aging campus space will require increased investments or risk growing backlog of needs

### Growing Backlog and Changing Demands

- Evaluate the mix of M&R investments to assure it favors highest priority, reliability(envelope/mechanical) type investments
- One – time investment should continue to focus on large renovations and possibly projects that alleviate strain created by density.

### Operational Inputs and Service Impacts

- Maintain high levels of PM(source of stewardship), despite continued strain on the operations budgets(manage service reductions in other areas)
- Communicate with the customer about service levels to minimize the impacts of future reductions in resources
- With utility infrastructure improvements, measure the total impact those changes will have on MU's energy profile (Cost, Carbon, Consumption)